

ACADEMIC INTEGRITY IN UNDERGRADUATE MEDICAL STUDENTS

NARGIS IQBAL¹, IQBAL AHMAD AZHAR², IQRA AHMAD³, ALIA BASHIR⁴

¹Department of Obs & Gynae, Al-Aleem Medical College, Lahore, ²Department of Pediatrics Medicine, Azra Naheed Medical College, Lahore, ³Department of Pediatrics Medicine, Mayo Hospital, Lahore, ⁴Department Of Obs & Gynae, Services Institute of Medical Sciences, Lahore

ABSTRACT

Objective: To compare the difference in responses regarding lapses in professionalism related to academic integrity between first and final year MBBS students, and in relation to gender.

Methods: A quantitative cross-sectional study was conducted in Allama Iqbal Medical College between first and final year MBBS students over a period of one year from March 2016 to Feb 2017. A total 200 students were included 100 from each class in the study. A validated and customized 47 items Dundee poly professionalism inventory-I questionnaire was given to all students.

Results: The response rate was 100%, all the students completed the Performa and returned. Eighty percent of the first-year students were between 18-20 years. Eighty percent of the final year students were 23-24 years. Out of 200 students 58.5% were females and 41.5% were males. The difference in responses regarding lapses in professionalism related to academic integrity was not statistically significant class-wise, but significant gender-wise.

Conclusion: The study highlighted that there is no difference in responses regarding lapses in professionalism related to academic integrity among class wise. However significant difference was observed gender wise; more lapses were observed in Males as compare to Females.

Key Words: Academic Integrity, Medical Students, Cheating, Plagiarism, Unprofessional Behavior

How to cite this article: Iqbal N, Azhar IA, Ahmad I, Bashir A. Academic integrity in undergraduate medical students. *Pak Postgrad Med J* 2019;30(2): 74-77

INTRODUCTION:

Academic Integrity is said to be the heart of every medical institution, it consists of certain principles and values that reflects mission / vision of the institution¹. Academic Integrity in all medical students is very important because it guarantees that students will definitely take responsibility to acquire knowledge and skills in classrooms and skill-labs. It will also ensure that quality of learning experiences will help them in managing the patients². Academic Integrity encourages the students to become honest, fair, responsible and trusty. There is a great change in medical education over the last decade. Now it has been acknowledged that traditional teaching methodology that encourages the student rote learning of facts, and meant to access

the knowledge is not enough to equip the undergraduate medical students with special professional ethics and characteristics that should be present in future doctors³.

These characteristics include altruism, empathy, fairness, honest, respect, responsible, trusty, good communication skills, competent in their respective fields, professionalism, behavior, and attitude. According to General Medical Council report honesty and trustworthiness are important attributes of a medical doctor⁴. In order to inculcate these characteristics to undergraduate medical students, curricular revision and implementation is required.

Academic integrity is said to be the cornerstone of ethical and professional development in medical educations. The term “academic integrity” is worldwide used as proxy for his/her colleague notably in relation to cheating and plagiarism⁵. It has been assumed and suggested that if medical students are dishonest at an undergraduate level they will continue to do dishonesty in future⁶. Globally academic dishonesty is quite frequent in most of the medical institutions including Pakistan⁷. There is a wide range of variations in students number complaining of academic misconduct by themselves in various surveys carried out in medical

Correspondence to: Nargis Iqbal, Department of Obs & Gynae, Al-Aleem Medical College, Lahore
E-mail: dr.nargisqbal@hotmail.com

Received: June 3, 2020;

Revised: August 25, 2020

Accepted: October 03, 2020

colleges of various countries⁸. Academic dishonesty can affect undergraduate medical students adversely. These students are deficient in the mandatory respected competencies in order to become safe and sound doctors⁹. A lot of issues have been reported regarding academic dishonesty and professionalism by Pakistani medical students both in the country and abroad because of their migration¹⁰. Cheating behavior in medical students may result incompetent, inefficient, future doctors who then treat patients¹¹. Plagiarism means the “use of other person’s ideas, words, phrases, facts, graphics, charts, tables, graphs, audio visuals or other intellectual products without appropriately citing the original source”. There are reports of plagiarism among many Pakistani medical students¹². Plagiarism in any form is a breach in professionalism related to academic integrity of medical students. Unprofessional professional behavior is a behavior that interferes with work or creates a hostile environment, towards colleagues, peers, teachers, patients and their families. Unprofessional behavior also includes fraud, threatening, drug / alcohol abuse, cheating with patients, and colleagues. It is quite common, as reports of un- professional behaviors has been observed among most of Pakistani Medical Students¹³. The purpose of the study is to find out specific issues regarding academic integrity so that strategies to rectify the issues can be planned and implemented in a structured way to prevent academic dishonesty and produce seven stars future doctors.

METHODS:

A quantitative cross sectional study was carried out in Allama Iqbal Medical College between first and final year MBBS students over a period of one year from March 2016 to Feb 2017. Non probability convenience sampling technique was used, a total of 200 students were included 100 from each class in the study. The data was collected by handing over an adapted, validated and customized 47 items (every items has four questions) Dundee poly professionalism inventory-1 questionnaire to all students in the classroom after informed consent, and taking permission from the institutional ethical committee. The purpose of the study, importance of the professional academic integrity and how to fill the Performa was explained to all the students. The students were instructed especially, to use honesty during filling the questionnaire. A three points scale, yes/no/not sure was used to record the students response for the assessment of each item of the questionnaire and then filled were collected after 20-30 minutes. All the data was entered and then analyzed using SPSS version 23.

RESULTS:

A total of 200 students 100 from first and final year each were included in the study. The response rate was 100%, all the students completed the Performa and returned. Regarding age distribution 80% of first and final students were 18-20 and 25-26 years respectively (as shown in figure I, II). Out of 200 students 117(58.50%) were females and 83(41.50%) were males (as shown in figure III). The objective of the study was achieved by entering the data taken from Dundee poly professionalism inventory-I and applying Chi-square test to get P-value for class and gender wise of responses for each behavior, P-value < 0.05 was considered to be statistically significant. P-value was significant in only 8 (4.25%) out of 188 responses class-wise, and in 67 (35.63%) out of 188 responses gender-wise. Out of 83 male students 46 (55.44%) and out of 117 female 52 (44.50%) students had shown lapses in their self-reported responses of 47 items, significant difference was present gender wise.

Figure-I

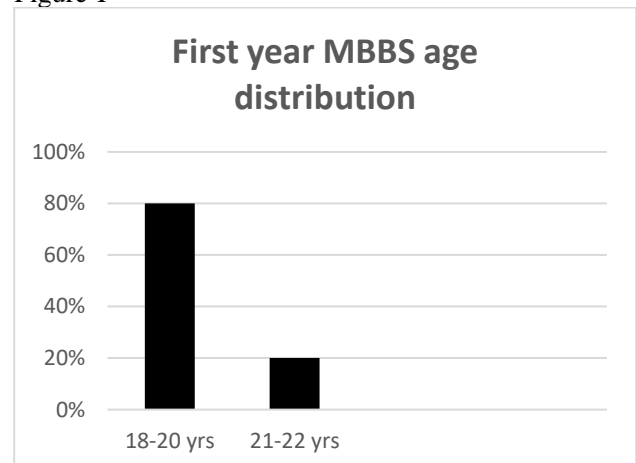


Figure 2

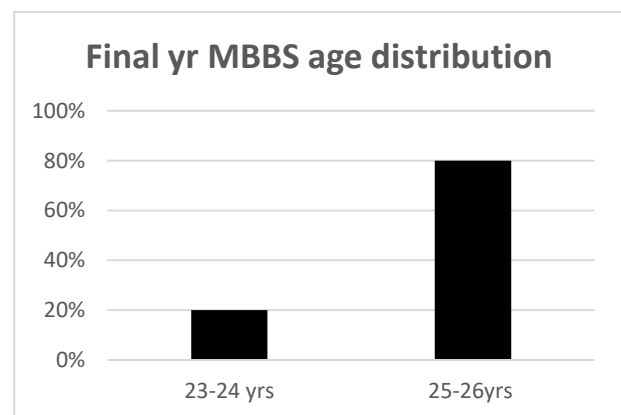
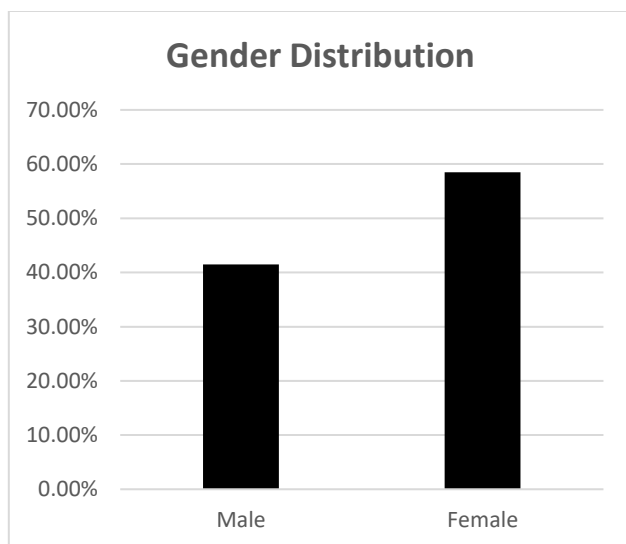


Figure 3



DISCUSSION:

Academic Integrity is the key component of professionalism. It is considered as a core value and certain behaviors e.g. honesty, truth, respect, responsibility and good communication skills must be present in the medical students. Globally academic lapses are quite common in medical colleges and various studies are supporting that prevalence's are increasing day by day Monica^{7, 14}.

The results of our study revealed that 80% of students of first year were between 18-20 years and 80% students of final year were between 23-24 years as shown in figure I, II. Out of 200 students 117 (58.8%) were females and 83 (41.5%) were males as shown in figure III. The increased female ratio could be explained on the bases of increased number of female students as compared to male in every class. This is because of open merit policy, more female students qualify entry test as compare to male students. This study is based on null and alternate hypothesis

H0 / Null Hypothesis: There will be no difference in responses between first and final year MBBS students, regarding lapses in professionalism related to academic integrity.

H1/Alternate Hypothesis: There will be significant difference between first and final year MBBS students regarding lapses in professionalism related to academic integrity.

There is hardly any data available in literature that showed difference in responses between class and gender-wise. This is the first study conducted in Allama Iqbal Medical College to show differences in responses between class and gender-wise with P-value.

P-value is defined as the probability of obtaining a result equal to or more extreme than what was observed. The smaller the P-value larger the significance because it tells the researcher that hypothesis under consideration may not adequately explain the observation. If P-value is less than 0.05 (statistically significant) we reject null hypothesis and accept alternate hypothesis. If P-value is more than 0.05 we accept null hypothesis and reject alternate hypothesis. In this study the P – value less than 0.05 said to be statistically significant was found in only 8 out of 188 responses that is 4.25%, while in 180 responses that is 95.75% the P – value was more than 0.05 which was not significant between first and final year students. Therefore, based on this analysis, the null hypothesis may not be rejected at 95% confidence level that means we are accepting null hypothesis. This gives an inspiration that there is an urgent need to revise the current curriculum and include medical ethics and professionalism in formal overt curriculum instead of keeping it in informal or hidden one. In our study the P-value less than 0.05 was found in 67 out of 188 (35.63%) self-reported responses of 47 items, significant differences were presents between male and female students. This gender-based difference in lapses related to academic integrity can be explained by sex role socialization theory which suggests that women as opposed to men are more strongly socialized to obey rules¹⁵. In our study male students found to be more dishonest as compared to females, this is supported by two other studies^{16, 17}. However different results were found in other studies, Hafeez, reported that female students admitted dishonesty more as compared to male¹⁸ but Whitley, and Babu reported that there was no significant difference in dishonest behaviors between male and female students^{19,20}.

CONCLUSIONS:

The study highlighted that there was no differences in responses regarding lapses in professionalism related to academic integrity among first and final year students.

In this study significant difference was observed gender-wise. More prevalence of lapses were observed in male students than females.

ETHICAL APPROVAL:

The study was approved by Ethical Review Committee for medical and biomedical research of University of Health Sciences, Lahore, Pakistan. Dated: 09 September, 2016.

REFERENCES:

1. Chapfika, B. 2008. The role of integrity in higher education. *International journal for Educational Integrity* 4, no. 1:43-49.
2. Crews, G.A., A.D. West. 2006. Professional integrity in higher education: Behind the green curtain in the land of Oz. *American Journal of Criminal Justice* 30, no. 2: 143-161.
3. Bruhn, J.G., G.Zajae, A.A, Al-Kazemi,, L.D. Prescott (2002). Moral position and academic conduct: Parameters of tolerance for ethics failure. *J of Higher Educ*; 73(4):461-493.
4. General Medical Council, (1998). *Good medical practice*. London: General Medical Council.
5. Rennie, S.C., Crossby, J.R. Are “tomorrow’s doctors “honest”? (2001). Questionnaire study exploring medical students’ attitudes and reported behavior on academic misconduct. *BMJ* ;322:274-327
6. Kalichman, M.W., Friedman, P.J., (1992). A pilot study of biomedical trainees, perception concerning research ethics. *Acad Med*; 67:769-775.
7. Monica, M., Ankola, AV, Ashokkumar, B.R., Hebbal, I., (2010). Attitude and tendency of cheating behaviors amongst undergraduate students in a dental institution of India. *Eur. J Dent Educ.*; 14(2):79-83.
8. Taradi S.K., Taradi, M., Dogar, Z., (2010). Students come to medical schools prepared to cheat: A multi campus study *J Med ethic*; 36: 666-670.
9. Aaron L, Simmons, P., Graham, Webb D., (2011). Academic dishonesty and unprofessional behavior. *Rad Tech*; 83(2):133-140.
10. Shukr, I., (2014). Adaptation and Validation of Dundee Poly professionalism inventory -1 for use in Pakistan. *J Ayub Med Col Abbott*; 26(4):548-553.
11. Kukolji, Taradi, S., Taradi M., Knezevic, T. (2010). Students come to medical schools prepared to cheat: A multi-campus investigation. *J Med Ethic*; 36:666-671
12. MacDonald, R., Carroll.J., (2006). Plagiarism: A complex issue requiring a holistic institutional approach, Assessment and Evaluation. *Int. J Hi educ.* ;(3):233-245.
13. Shirazi, B., Jafarey, A.M., Moazam, F., (2010). Plagiarism and the medical fraternity: A study of knowledge and attitudes. *J Pak Med Assoc*;60(4):269-273.
14. Fontana, JS., (2009). Nursing faculty experiences of student’s academic dishonesty. *J Nurse Educ*; 48:181-185.
15. MaCabe DL, Trevino LK., (2010). Individual and contextual influences on academic dishonesty: A multi-campus investigation. *Res High Educ*; 38:379-396.
16. Ogas V., Jeronic A., (2014). Who would students ask for help in academic cheating? Cross- sectional study of medical students in Croatia. *BMC Medical Educ*; 14:1048-1054.
17. Henning MA., Ram S., Malpas P., Shulruf B., Kelly F., (2013). Academic dishonesty and ethical reasoning: pharmacy and medical school students in New Zealand. *Medical Teach*; 35(6):1211-1217.
18. Hafeez K., Khan M., Jawaid M., Haroon S., (2013). Academic misconduct among students in Medical Colleges of Karachi, Pakistan. *Pak J Med Sci.*; 29: 699-702.
19. Whitley BE Jr., Keith-Spiegel P., (2001). Academic integrity as an institutional issue. *Ethic Beh*; 11:325-342.
20. Babu, T.A., Joseph, N.M., Sharmila, V., (2011). Academic dishonesty among undergraduates from private medical schools in India. Are we on the right track?*Med teach*; 33:1-3.

AUTHORS’ CONTRIBUTION:

NI: Proposal of study, manuscript writing, Literature research, data Collection

IAA: Manuscript writing

IA: Data collection, statistical analysis

AB: Proposal of study, Manuscript writing